

From: [Guinotte, John](#)
To: [Grizzle, Betty](#)
Cc: [Shoemaker, Justin](#); [Turner, Ed](#); [Stephen Torbit](#)
Subject: Re: Adaptation Partnership assessments
Date: Friday, January 27, 2017 10:54:01 AM
Attachments: [glacier den sites meltout.xlsx](#)

Hi Betty,

No I haven't seen the site. Can you share the two documents? I just had a closer look at the 13 den sites in Glacier where I have historic Modis snow cover data. Spreadsheet is attached. Looks like melt out date was well after the dates Copeland recorded for all sites.

Best, John

John Guinotte
Fish and Wildlife Biologist
Ecological Services
U.S. Fish and Wildlife Service
Mountain Prairie Region 6
134 Union Blvd., Lakewood, CO 80228
303-236-4264
john_guinotte@fws.gov

On Fri, Jan 27, 2017 at 10:42 AM, Grizzle, Betty <betty_grizzle@fws.gov> wrote:

John - Have you seen the following website?

<http://adaptationpartners.org/nrap/>

I received a comment letter today referencing 3 documents produced by this collaborative partnership (identified as drafts). I am reviewing these now, but it looks like two of them are vulnerability assessments related to climate change effects - essentially generated scenarios - and wolverine is one of 20 species considered.

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Betty J. Grizzle, D.Env.
Fish and Wildlife Biologist
U.S. Fish and Wildlife Service
Carlsbad Fish and Wildlife Office
2177 Salk Ave, Suite 250
Carlsbad, CA 92008
760-431-9440, ext. 215
760-431-5901 fax

FID	Common_Nam	Directions	Observers	Person_Con	Verificati	Source_Age	DEN	FWS_SOURCE	FWS_LINK	DATE	DEN_TYPE	STRUCTURE	TOTAL_DETE	FWS_YEAR	FWS_DECADE	Comments_A	meltout_date
0	WOLVERINE	GLACIER PARK DENS FROM THE 2000'S	JEFF COPELAND	RESEARCHER	FIELD WORK	JEFF COPELAND	1	GLACIER_DENS_84	1	20030400	NATAL	LOG COMPLEX	-9	2003	2000	GLACIER PARK DENS FROM THE 2000'S	5/25/03
1	WOLVERINE	GLACIER PARK DENS FROM THE 2000'S	JEFF COPELAND	RESEARCHER	FIELD WORK	JEFF COPELAND	1	GLACIER_DENS_84	2	20030500	MATERNAL	LOG COMPLEX	-9	2003	2000	GLACIER PARK DENS FROM THE 2000'S	5/25/03
2	WOLVERINE	GLACIER PARK DENS FROM THE 2000'S	JEFF COPELAND	RESEARCHER	FIELD WORK	JEFF COPELAND	1	GLACIER_DENS_84	3	20040400	NATAL	LOG COMPLEX	-9	2004	2000	GLACIER PARK DENS FROM THE 2000'S	6/4/04
3	WOLVERINE	GLACIER PARK DENS FROM THE 2000'S	JEFF COPELAND	RESEARCHER	FIELD WORK	JEFF COPELAND	1	GLACIER_DENS_84	4	20040400	MATERNAL	DOWN LOG	-9	2004	2000	GLACIER PARK DENS FROM THE 2000'S	6/29/04
4	WOLVERINE	GLACIER PARK DENS FROM THE 2000'S	JEFF COPELAND	RESEARCHER	FIELD WORK	JEFF COPELAND	1	GLACIER_DENS_84	5	20040500	MATERNAL	LOG/BOULDER	-9	2004	2000	GLACIER PARK DENS FROM THE 2000'S	6/29/04
5	WOLVERINE	GLACIER PARK DENS FROM THE 2000'S	JEFF COPELAND	RESEARCHER	FIELD WORK	JEFF COPELAND	1	GLACIER_DENS_84	6	20050300	NATAL	SPIDER TREE	-9	2005	2000	GLACIER PARK DENS FROM THE 2000'S	6/11/05
6	WOLVERINE	GLACIER PARK DENS FROM THE 2000'S	JEFF COPELAND	RESEARCHER	FIELD WORK	JEFF COPELAND	1	GLACIER_DENS_84	7	20050400	MATERNAL	SPIDER TREE	-9	2005	2000	GLACIER PARK DENS FROM THE 2000'S	6/11/05
7	WOLVERINE	GLACIER PARK DENS FROM THE 2000'S	JEFF COPELAND	RESEARCHER	FIELD WORK	JEFF COPELAND	1	GLACIER_DENS_84	8	20050500	MATERNAL	SPIDER TREE	-9	2005	2000	GLACIER PARK DENS FROM THE 2000'S	6/11/05
8	WOLVERINE	GLACIER PARK DENS FROM THE 2000'S	JEFF COPELAND	RESEARCHER	FIELD WORK	JEFF COPELAND	1	GLACIER_DENS_84	9	20060400	UNCONFIRMED	LOG COMPLEX	-9	2006	2000	GLACIER PARK DENS FROM THE 2000'S	5/14/06
9	WOLVERINE	GLACIER PARK DENS FROM THE 2000'S	JEFF COPELAND	RESEARCHER	FIELD WORK	JEFF COPELAND	1	GLACIER_DENS_84	11	20060400	UNCONFIRMED	UNK	-9	2006	2000	GLACIER PARK DENS FROM THE 2000'S	6/7/06
10	WOLVERINE	GLACIER PARK DENS FROM THE 2000'S	JEFF COPELAND	RESEARCHER	FIELD WORK	JEFF COPELAND	1	GLACIER_DENS_84	12	20060500	NATAL	LOG COMPLEX	-9	2006	2000	GLACIER PARK DENS FROM THE 2000'S	5/31/06
11	WOLVERINE	GLACIER PARK DENS FROM THE 2000'S	JEFF COPELAND	RESEARCHER	FIELD WORK	JEFF COPELAND	1	GLACIER_DENS_84	13	20060500	MATERNAL	LOG COMPLEX	-9	2006	2000	GLACIER PARK DENS FROM THE 2000'S	5/31/06
12	WOLVERINE	GLACIER PARK DENS FROM THE 2000'S	JEFF COPELAND	RESEARCHER	FIELD WORK	JEFF COPELAND	1	GLACIER_DENS_84	14	20070500	NATAL	BOULDER/LOG	-9	2007	2000	GLACIER PARK DENS FROM THE 2000'S	6/4/07